MX170QD

Intel Q170 mini-ITX motherboard supports 6th/7th Generation 14nm Intel Kaby Lake/ Skylake Core i7/i5/i3 Processors

Features

- High Reliability Gold Plating Connectors
- Intel LGA1151 socket supports 6th/7th generation 14nm Intel Kaby Lake[1] / Skylake Core i7/i5/i3 and Celeron processors
- 2 x (Gold Plated) SODIMM slots support up to 32 GB Dual Channel DDR4 system memory
- Supports 3 Independent Displays
- 2 x DP++ (Gold Plated), 1 x HDMI (Gold Plated), 1 x LVDS4 x SATA III (Gold Plated), 4 x USB 2.0 (Gold Plated), 6 x USB 3.0 (Gold Plated), 2 x COM Ports
- 1 x PCIe x16 (Gold Plated), 1 x mini-PCIe (Gold Plated) with SATA III support
- 1 x M.2 (Gold Plated) (2280 or 2242), DC-in (Gold Plated)
- iAMT 11.0, TPM 2.0
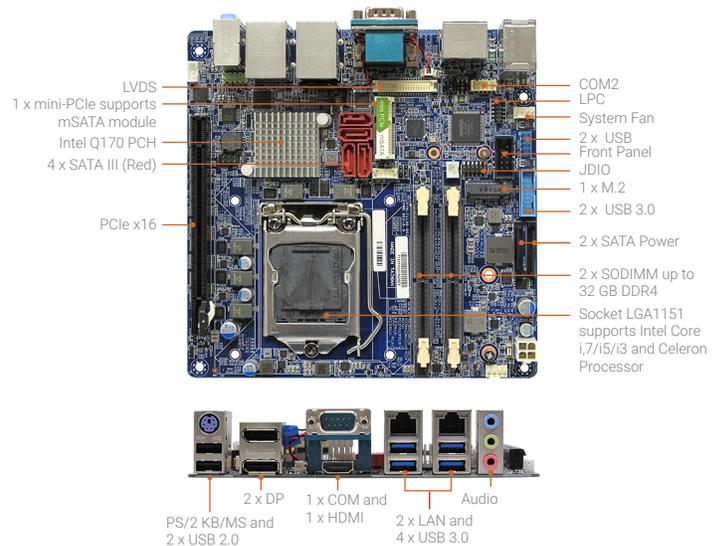- Kaby Lake processors support OS Win 10 and above; support Win 7 with external video cards

LVDS
1 x mini-PCIe supports mSATA module
Intel Q170 PCH
4 x SATA III (Red)
PCIe x16

COM2
LPC
System Fan
2 x USB Front Panel
JDIO
1 x M.2
2 x USB 3.0
2 x SATA Power
2 x SODIMM up to 32 GB DDR4
Socket LGA1151 supports Intel Core i,7/i5/i3 and Celeron Processor

PS/2 KB/MS and 2 x USB 2.0
2 x DP
1 x COM and 1 x HDMI
2 x LAN and 4 x USB 3.0
Audio

Specifications

System

CPU	Intel LGA1151 socket supports 6th/7th generation 14nm Intel Kaby Lake[1] / Skylake Core i7/i5/i3 processors
System Chipset	Intel® Q170 PCH
System Memory	2 x (Gold Plated) SODIMM slots support up to 32 GB Dual Channel DDR4 2133 MHz vertical type memory sockets
Audio	Realtek HD Audio support 7.1 channel sound playback
Ethernet	LAN1: Intel® I219-LM Gigabit Ethernet Controller LAN2: Intel® I211-AT Gigabit Ethernet Controller
BIOS	128Mb SPI BIOS
I/O Chip	Nuvoton NCT6106D
Expansion	1 x PCIe x16 Slot (Gold Plated) 1 x Full/Half Size mini-PCIe (mSATA III Support) (Gold Plated) 1 x M.2 Slot (Gold Plated) (Support 2280 and 2242)
Watchdog Timer	Reset: 1 sec. ~ 255min. and 1sec. or 1min./step
H/W Status Monitor	Monitoring System Temperature, Voltage, with Auto Throttling Control
TPM	TPM 2.0

Display

Graphics Engine	Intel Integrated HD Graphic
Interfaces	HDMI Max Resolution: 4096×2160@24Hz DP Max Resolution: 4096x2304@60Hz LVDS Max Resolution: 1920x1200@60Hz * Max resolution depends on how many displays are active One Panel Display: 4096 x 2304 @ 60 Hz Two Panel Displays Concurrently: 2880 x 1800 @ 60 Hz Three Panel Displays Concurrently: 2304 x 1440 @ 60 Hz
Multiple Display	Supports 3 Independent Display

External I/O

KB/MS	1 x PS/2 KB/MS
Audio	Line-in, Line-out, Mic-in
USB	4 x USB 3.0 and 2 x USB 2.0 Connectors
COM	1 x DB-9 RS-232/422/485 Connector (Gold Plated)
LAN	2 x RJ-45
HDMI	1 x HDMI Connector (Gold Plated)
DisplpayPort	2 x DisplayPort (supports DP++) Connectors (Gold Plated)

Internal I/O

LVDS	1 x 18/24 bits Dual Channel LVDS
USB	1 x USB 2.0 Headers (2 Ports Total) (Gold Plated) 1 x USB 3.0 Header (2 Ports Total) (Gold Plated)
COM	1 x RS-232 (with Voltage Selection) (Gold Plated)
SATA	4 x SATA III and SATA Power Connectors (Gold Plated)
DC-in	1 x 4-pin DC-in (Gold Plated)
MIO	1 x 8-bit GPIO, 1 x LPC, 1 x SPI, 1 x Front Audio, 1 x Front Panel (Gold Plated), 1 x 4-pin CPU Fan, 1 x 4-pin Chassis Fan, 1 x Cable Type CMOS Battery, 1 x Backlight Locking (Gold Flashed), 1 x Chassis Intrusion Locking Type Header (Gold Flashed)

Mechanical & Environment

Power Type	12V, 16 - 24V DC
Operating Temp	0°C ~ 60°C
Storage Temp	-20 ~ 80°C
Operating Humidity	5% ~ 90% Relative Humidity, Non-condensing
Storage Humidity	5% ~ 90% Relative Humidity, Non-condensing
Form Factor	Mini ITX
Dimensions	6.7" (L) x 6.7" (W)
Certification Information	CE, FCC Class B
Weight	0.88 lbs

Ordering Info

MX170QD	Intel Q170 Mini ITX Motherboard with DC Power
Accessory	1 x I/O Shield, 1 x DC in power cable, 1 x SATA Power Cable
183000000006	2.00mm pitch 12" length Serial cable
182437200040	2.54mm pitch 14" length Dual port USB cable w/ full height bracket. (USB 2.0)

* All product specifications and images are subject to change without notice. Last update: 2020/12/14